

Australian Standard 3159 — 1980

APPROVAL AND TEST SPECIFICATION FOR ELECTRONIC SOUND AND VISION EQUIPMENT



STANDARDS ASSOCIATION OF AUSTRALIA

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THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL organizations and departments were officially represented on the committee entrusted with the preparation of this standard:

**Australian Broadcasting Commission
Confederation of Australian Industry
Department of Defence
Department of Productivity
Department of Transport
Electronics Importers Association
Federation of Australian Commercial Television Stations
Federation of Australian Radio Broadcasters
Independent testing organization
Institution of Radio and Electronics Engineers
Postal and Telecommunications Department
Telecom Australia**

This standard, prepared by Committee TE/1, Safety of Electronic Equipment, was approved on behalf of the Council of the Standards Association of Australia on 15 April 1980, and was published on 1 July 1980.

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Amendment No 1
to
AS 3159—1980
Approval and Test Specification
for
ELECTRONIC SOUND AND VISION EQUIPMENT

REVISED TEXT

The 1980 edition of AS 3159 is amended as follows; the amendments should be inserted in the appropriate places.

SUMMARY: The following sections of the standard are covered by this amendment: Clauses 2.17.1, 2.17.3 (new) and 2.20 (new), and Appendix F(F2). In addition references to AS C100, AS C112 and AS C126 have been changed to AS 3100, AS 3112 and AS 3126 respectively.

Published on 8 November 1982.

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AMENDMENT No 2

to

AS 3159—1980

Approval and Test Specification

for

ELECTRONIC SOUND AND VISION EQUIPMENT

REVISED TEXT

The 1980 edition of AS 3159 is amended as follows; the amendment should be inserted in the appropriate place.

SUMMARY: The following clause of the standard is covered by this amendment: Clause 2.20.

Published on 11 May 1984.

Clause 2.20 as inserted by Amendment No 1 published 8 November 1982.

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No 2
MAY
1984

Delete the fourth paragraph which reads as follows:

'If it is evident from the design of the equipment that there will be no d.c. component, this test is not conducted.'

and *substitute* the following for the fourth paragraph:

'If it is evident from the design of the equipment that there will be no d.c. component, e.g. equipment provided with full-wave mains power supply or mains isolating transformer, this test is not conducted.'

This amendment forms part of the specification on publication.

August 1980

STANDARDS ASSOCIATION OF AUSTRALIA
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CORRIGENDUM
to
AS 3159—1980
APPROVAL AND TEST SPECIFICATION FOR ELECTRONIC
SOUND AND VISION EQUIPMENT

SUMMARY: This correction applies to Clause 6.6.5.

Published on 1 September 1980.

Page 32. Clause 6.6.5.

4th line—*alter* '(a) and (b)' to '(b) and (c)'.

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AUSTRALIAN STANDARD

**APPROVAL AND TEST SPECIFICATION
FOR
ELECTRONIC SOUND
AND VISION EQUIPMENT**

AS 3159 — 1980

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PREFACE

This edition of this standard was prepared by the Association's Committee on Safety of Electronic Equipment. It represents an updating of the 1976 edition of the standard by the incorporation of Amendments 1 to 5 thereto, plus changes to Clauses 2.5.1, 2.5.4, 2.12.2 (b), 2.14, 5.2, 6.1 and 6.6.5. The majority of these changes are editorial in nature introduced for the purpose of clarifying the intention of the particular clause. Clause 2.14 however, has been replaced entirely by the equivalent clause from IEC 65, modified by references to specific Australian approval and test specifications covering prescribed items of equipment.

It is one of a series of approval and test specifications issued by the Association under Part 2 of the SAA Wiring Rules. These specifications are accompanied by a general specification AS C100, containing definitions and general requirements for electrical materials and equipment. The purpose of these specifications is to outline conditions which must be satisfied to secure approval for the sale and use of electrical equipment in Australia. Only safety matters and related conditions are covered.

This edition was prepared for the purpose of minimizing a number of difficulties encountered in the application of AS 3159, pending the completion of an even more extensive examination of approval and test criteria suitable for electrical approval purposes. It should be stressed that the information conveyed in this edition may well be modified and supplemented by other requirements after a thorough review of all factors involved which is being undertaken by the committee. In particular, attention has been given to the aligning of Australian requirements with those applying internationally. In the preparation of this edition, extensive reference was made to IEC 65, and acknowledgement is made for the assistance received therefrom.

This standard requires reference to the following Australian standards and approval and test specifications:

- AS 1044 Limits of Electromagnetic Interference for Electrical Appliances and Equipment
- AS 1053 Radio Interference Limits and Measurements for Television and Radio Receivers
- AS 1099 Basic Environmental Testing Procedures for Electronics and Telecommunications Purposes
- AS 1417 Rules for Antennas for the Reception of Radio and Television Broadcasting for the Range 30 to 1000 MHz
- AS 3000, Part 1—SAA Wiring Rules
- AS 3116 Elastomer Insulated Electric Cables and Flexible Cables for Working Voltages of 0.6/1 kV

- AS 3121 Insulating Mouldings
- AS 3133 Air Break Switches
- AS 3145 Radio Interference Suppression Devices
- AS 3147 PVC Insulated Electric Cables and Flexible Cables for Working Voltages of 0.6/1 kV
- AS 3191 Electric Flexible Cords (Metric units)
- ~~AS 3100~~
~~AS C100~~ Definitions and General Requirements for Electrical Materials and Equipment
- SEE AMENDMENT No. 1**
- AS C109 Appliance Plugs and Appliance Inlet-sockets
- ~~AS 3112~~
~~AS C112~~ Plugs and Plug Sockets
- ~~AS 3126~~
~~AS C126~~ Extra-low Voltage Transformers
- AS C320 Classification of Insulating Materials for Electrical Machinery and Apparatus on the Basis of Thermal Stability in Service
- ISO/4046 Paper, Board, Pulp and Related Terms—Vocabulary
- BS 3196 Cotton Cheese Cloth: Tubulars, Flats and Caps

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Preface.

Delete 'AS C100', 'AS C112' and 'AS C126' and *substitute* 'AS 3100', 'AS 3112' and 'AS 3126' respectively.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard**APPROVAL AND TEST SPECIFICATION FOR
ELECTRONIC SOUND AND VISION EQUIPMENT**

F O R E W O R D

This specification is one of the SAA Approval and Test Specifications which form Part 2: Materials, of AS 3000, SAA Wiring Rules. These specifications are intended to prevent injury to persons and damage to property by establishing essential requirements and minimum safety standards for materials and for the design and construction of fittings, accessories, appliances and equipment used in or in connection with any electrical installation.

In every State of Australia legislation has been enacted which requires that electrical equipment of a prescribed class or type shall not be marketed unless approved by the relevant Statutory Electricity Authority. In general, the basis of approval is the series of Approval and Test Specifications referred to above.

For equipment which is not prescribed, statutory and supply authorities may require proof that it complies with the relevant approvals specifications or some requirements thereof. For this reason, voluntary examination schemes are operated by the statutory authorities.

Though not a part of this specification, attention is drawn to the fact that Australian statutory electricity authorities prohibit the connection of television receivers of a kind that has a half-wave rectified power supply that is not electrically isolated from the mains power supply by means of a double-wound transformer incorporated in, or forming part of, the television receiver.

Irrespective of the need for approval of equipment covered by this specification, the Association wishes to emphasize that the specification establishes minimum standards of safety for electronic sound and vision equipment. For this reason alone there is a responsibility on each manufacturer or importer of electronic equipment to comply with the specification in all respects.